

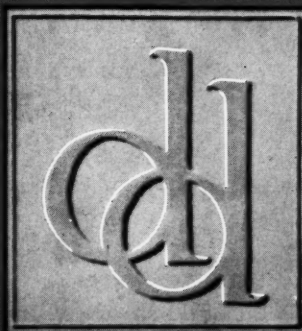
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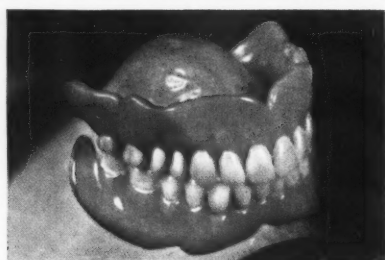
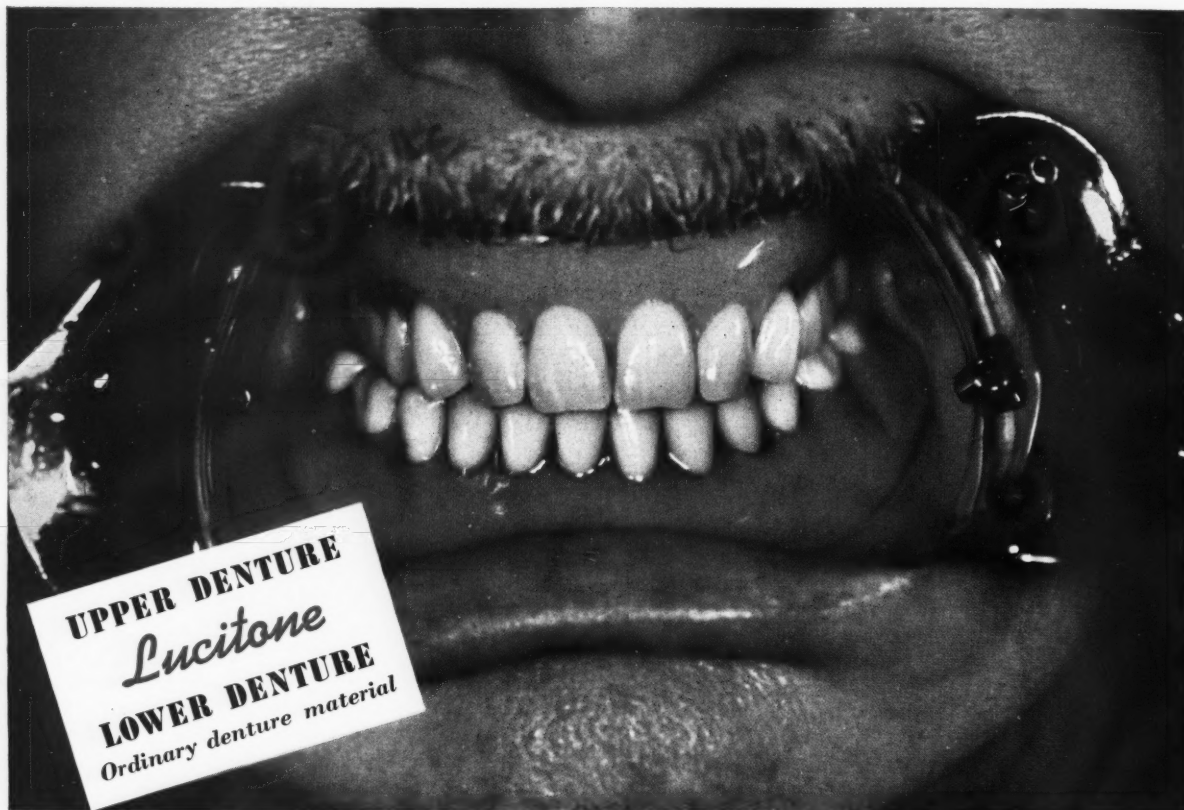
THE DENTAL DIGEST

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NOVEMBER, 1939

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About Our CONTRIBUTORS

W. LES WARBURTON, D.D.S. (Northwestern University Dental School, 1918) is a general practitioner with a special interest in prosthetics. He has previously written on the subject and has organized study clubs for that purpose.

•

LEROY E. KNOWLES and RUSSELL W. BASSETT both received the D.D.S. in 1923 from the University of Southern California College of Dentistry. They are likewise general practitioners who see more than the mechanics in restorative dentistry; they see it as a fine art in reproduction of anatomy and color. In this issue, Doctors Knowles and Bassett point this original analogy: "After having done considerable work on labial and buccal forms of teeth, we are of the opinion that this (morphology is primary to color) is true. A good illustration of this is in the continual changing of the colors of a body of water, which depends on the surface contour."

LAURENCE A. DUNN, D.D.S. photographed Figs. 6 through 12 for the authors. Doctor Dunn is himself a DIGEST contributor: February and July, 1939. He also did the photography for E. D. Shooshan, D.D.S. in our December, 1936, issue.

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JAMES HALL SMITH, D.D.S. (Thomas W. Evans Museum and Dental Institute, University of Pennsylvania, 1923) was an instructor at the University of Pennsylvania in operative techniques for ten years, from 1925 to 1935. Doctor Smith takes his own clinical photographs with an Argus camera. He is a general practitioner who believes that photography should be more frequently employed at the dental chair for clinical records and for patient education. THE TRANSFORMATION OF THE HUMAN DENTITION BY IMMEDIATE DENTAL REPLACEMENTS in this issue marks the return to the use of color illustrations in our articles. From its inception as the reorganized DENTAL DIGEST in 1932 THE DENTAL DIGEST has used editorial color, but until now color reproduction has been for the most part restricted to our VISUAL EDUCATION IN DENTISTRY charts. The color reproductions this month are from Kodachrome transparencies.

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RALPH W. EDWARDS D.D.S., professor of oral surgery at Kansas City-Western Dental College, is familiar to our readers. He returns in this issue with another of his easy-to-read and informative reports.

THE DENTAL DIGEST

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708 Church Street, Evanston, Illinois

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Esthetics in Full Denture Planning*

W. L. WARBURTON, D.D.S., Salt Lake City

ALTHOUGH FROM A dental standpoint mechanical function and comfort are most essential, appearance is of prime importance to many patients. Many patients, especially women, will persevere with considerable discomfort so long as they have beauty. I believe that there exists a close correlation of the esthetic and of the biomechanical fundamentals of denture construction. If the principles of esthetics are reproduced, there will be a better chance of success in the mechanical; also, if the mechanical principles are followed, tooth arrangement will look more natural.

Esthetics¹ as it applies to dentistry is that science which deduces from Nature the rules and principles of facial and dental art. Dental art has been defined as that science which has to do with the theory or practice of esthetics in the expression of beauty in form, size, arrangement, and hue of the teeth and of facial expression. To have an expression of beauty in a dental restoration, there must be a combination of qualities that will gratify the eye by its appearance and the ear by the sound produced in speech. To achieve a beautiful restoration, Nature must be imitated, so that detection of the artificial is difficult. It would be far better to hear a patient say that no one had noticed her new denture than to hear her say that some one had remarked: "What a beautiful set of teeth! Who made them?" It is a compliment to the dentist to make dentures that defy detection. A denture that is natural in appearance is the

one that has in its reproduction all individual characteristics of tooth form, color, and arrangement.

Contouring

Contouring of the external features of the face is the first consideration in esthetics. Three factors enter into a study of facial contour; namely, vertical dimension, arrangement of teeth, and wax contour. Vertical dimension is the first in importance and is receiving a great deal of mention in the literature. The establishment of harmonious jaw relationship is a factor that only the patient and operator can determine. There seems to be no definite rule pertaining to the determination of vertical dimension except that a case needing an extreme opening requires the procedure to be in stages, with an interval of several months between each degree of opening—probably 3 mm. being the limit of opening at each stage.

The arrangement of the teeth has a definite control over the facial contour and will be discussed later.

Wax contouring is the most neglected part of feature contouring and only by practice can dentists expect to develop ability in this technique. The use of contoured "plumpers" is recommended in almost every denture in order to give proper fullness to lips and cheeks. Many operators make the mistake of trying to lift the corners of the mouth with plumpers over the cuspid area of the maxillary denture. This is best accomplished by adding contour to bicuspid and molar region. If plumpers are used, it is best to add soft wax to the wax try-in outside of the mouth and then, placing the try-in in the mouth, to mold the plumper into position with pressure on the cheeks.

Facial contour is mentioned because it is the first impression of esthetics; but as the patient opens his mouth the possibilities are seen of reproducing individual characteristics of tooth form, color, and arrangement. As the dentist develops knowledge and ability, he will be better able to reproduce a natural-looking and harmonious restoration. Ability is developed by observation and experience,

and success is in proportion to effort. To develop a knowledge of esthetics dentists must be able to discriminate as to form, color, and arrangement of teeth.

Form—The selection as to form should be considered from the accepted classification: square, tapering, or ovoid. Experience has proved this classification to be the only universally accepted rule in denture construction. When in doubt as to facial outline arch form has been found to be a check on the selection of typical form of teeth. Arch form has a definite relation to facial outline form and is often overlooked; nevertheless some dentists select tooth form, using arch form as their only guide.

When considering form in the artificial, dentists have accepted the form as produced by the manufacturer and have failed to discriminate as to mesial-distal and gingivo-incisal curvature; or, what might be considered as the third dimension in tooth outline. No matter what outline form is present, there should be an exaggerated curvature of the labial surface, so that light refraction may be better controlled. If a flat surface is imperative, then this surface should be roughened by surface irregularities to break up the light reflection; this flattened surface can be stained to darken the approximal margins and either the gingival or incisal portion, thereby absorbing some of the light.

Outline form is considerably altered by age, the main factors involved being incisal wear and contact point abrasion. Consideration should be given to these factors when associating outline form of teeth with pa-

*Read before the National Society of Denture Prosthetists, Milwaukee, July 13, 1939.

Hooper, B. L.: Prosthodontia as a Fine Art. DENTAL DIGEST, 33:691 (October) 1927. Stansbery, C. J.: Complete Full Denture Technique. DENTAL DIGEST, 39:156 (April) 1933. House, M. M.: Art—A Fundamental in Denture Prosthesis. J. A. D. A. 24:406 (March) 1937; Esthetics and Denture Construction. J. A. D. A. 14:232 (February) 1927. Howard, James: Esthetics as Applied to Full Denture Prosthesis. J. A. D. A. 10:135 (February) 1923. Lowery, P. C.: Facial Expression an Important Factor in Full Denture Construction. J. A. D. A. 9:383 (May) 1922. McKevitt, Frank: The Typical Alignment of the Natural Anterior Teeth as an Esthetic Guide to Their Artificial Arrangement. DENTAL DIGEST, 35:491 (August) 1929. Schlosser, R. O.: Complete Denture Service. Philadelphia W. B. Saunders Company, 1939, pages 84-104; 183-190; 219-253. Nickols, I. G.: Prosthetic Dentistry. St. Louis, C. V. Mosby Company, 1930, pages 208-214. Sears, Victor: Art Factors in Denture Construction. J. A. D. A. 25:3 (January) 1938.

Fig. 1—Teeth in gentle occlusion with lips closed.

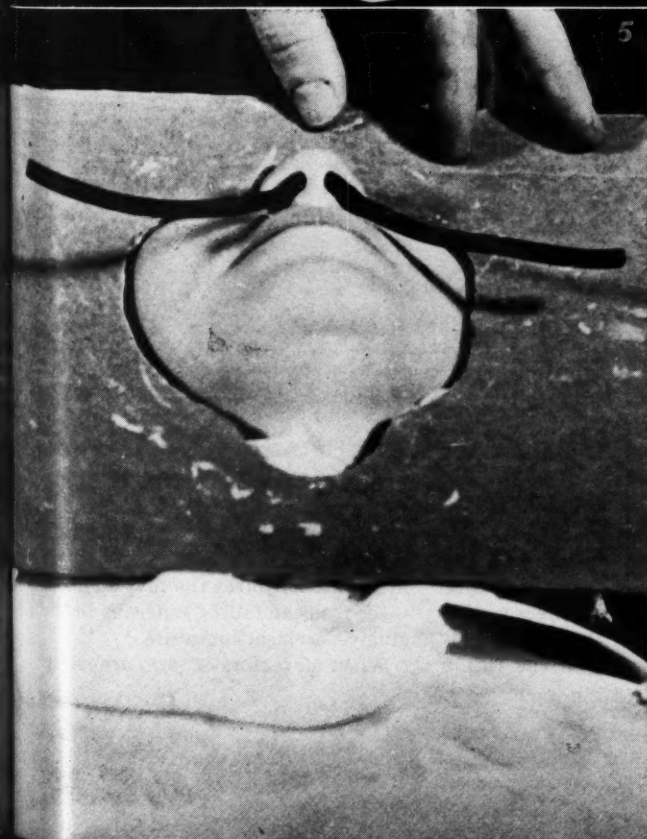
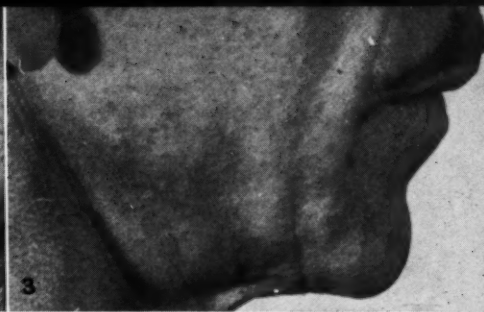
Fig. 2—Teeth closed, with broad smile, showing both teeth and gums.

Fig. 3—Profile view.

Fig. 4—Masks of lower half of face.

Fig. 5—Patient in horizontal position, with cardboard outline. Tubes in nostrils can be eliminated after a little practice.

Fig. 6—Application of hydrocolloid material with brush.



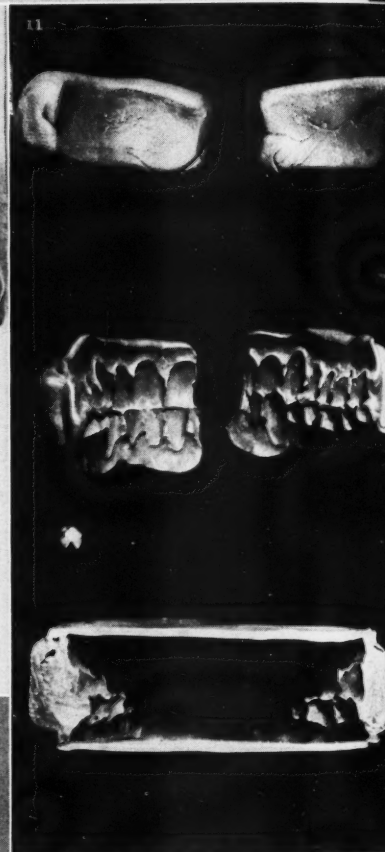
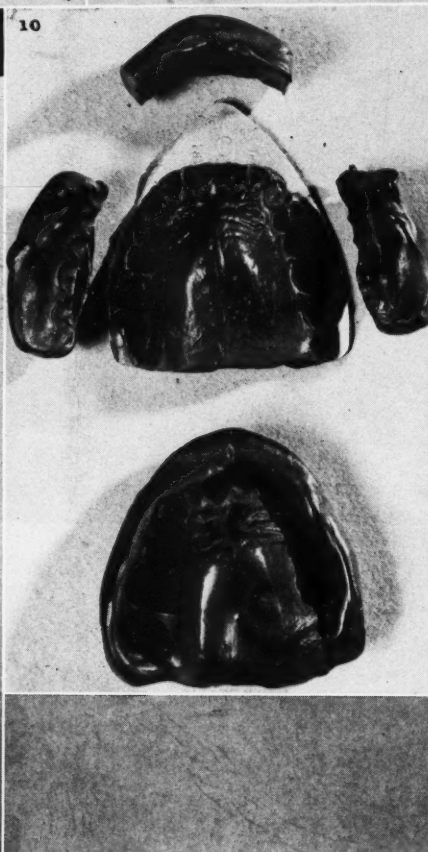


Fig. 7—Plaster reinforcement.

Fig. 8—Mask removed.

Fig. 9—Profile template: right, incomplete; left, correct.

Fig. 10—Sectional impression preferable to snap impression.

Fig. 11—Three steps in the making of two-section anterior block study model.

tients past 40 years of age. The incisal wear should show considerable unevenness and irregularity, because it is associated with irregularity of arrangement. Many dentists fail to discern lack of symmetry of form. Frequently lateral incisors in the same mouth are found to differ entirely as

to type; likewise cuspids are often seen to lack symmetry.

Tooth form should not only be considered for the six anterior teeth but for the first bicuspid as well. No type of manufactured teeth offers a suitable selection as to the form of bicuspid teeth. Possibly in the future

teeth will be carded in one-by-eight's instead of one-by-six's as at present, thus placing the first bicuspid according to typical form. Esthetics in most cases involves the first bicuspid—the bicuspid failing generally in the gingivo-occlusal curvature.

When all factors of form are taken

into consideration, few manufactured teeth meet the requirements of esthetics; therefore, form must be handled by selecting the teeth most nearly meeting the requirements and then contouring by grinding each individual tooth into harmonious relationship as to contour and surface irregularities.

Size—When the outline has been selected, size must be considered. Ruggedness calls for large teeth and a small delicate mouth calls for small teeth; but too many dentures are made with unnecessarily small teeth.

Color

The study of color² is not so difficult. The dentist can improve his sense of color discrimination by a little effort. A thorough knowledge of color in its three dimensions, hue, saturation, and brilliance, can be gained from the literature and from a little observation of the natural teeth as compared with porcelain teeth. All factors have a definite relationship to complexion and only as selections are made with a consideration of hue, saturation, and brilliance are we likely to have harmonious restorations.

Hue is the basic spectral color and its degree of intensity is saturation. Brilliance is judged by the amount of light refraction the tooth may have; that is, whether it is light or dark; or by the amount of white or black incorporated within the color. Curvature, angle of arrangement, and surface irregularities are factors that also control the brilliance of tooth color. Flat-surfaced and smooth-surfaced teeth and those arranged in a straight line like piano keys give a decided light color effect and appear too light unless the brilliance is decreased.

A knowledge of color should be de-

veloped with particular attention paid to its dependence on illumination and the influence of complexion and clothing.

When matching the basic color in preextraction cases there is often found more than one basic hue within the same mouth. It is this lack of uniformity within colors that helps to build most esthetic dentures, as opposed to the monotony of color in the sets produced by manufacturers. Esthetics may be improved by breaking up the colors, using teeth of perhaps three different shades.

Shade guide selections must be carried out under ideal lighting conditions, and it is suggested that a north exposure of reflected noonday sunlight, not intensified by some color object, is the ideal light. The daylight blue bulbs for artificial lighting are not to be recommended, because they give an unbalanced spectral value. The manufacture of these bulbs is gradually being discontinued. The nearest approach to natural daylight is the daylight fluorescent light of recent development. My office and laboratory have recently been equipped with these lights and they have given me satisfaction in the control of color effects, especially with stains.

If all factors of color are considered, few manufactured teeth meet the requirements of esthetics; therefore, color must be determined by selecting the teeth most nearly meeting the requirements and staining each individual tooth with mineral oxides.

Arrangement

To develop a power of discrimination as to tooth arrangement, it is necessary to study the natural teeth. By making casts of a great number of mouths and classifying and studying these models, we can best develop ability to arrange teeth in natural-appearing dentures. It is not necessary to make full models; anterior block casts of the anterior teeth, upper and lower in centric occlusion, make fine study models. These are

made from modeling compound impressions of two sections—right and left—including the bicuspids rather than the frequently seen single block impression which reproduces only the six anterior teeth.

The esthetic arrangement of teeth does not necessarily mean an irregular arrangement, although a symmetrical arrangement always invites suspicion of the artificial. Asymmetry does not have to be extreme—any subtle irregularity will greatly improve the set-up whether it is by spacing, rotating, lapping, crowding, change of inclination, or elongating of any of the teeth.

Factors governing the arrangement of teeth are: arch form, profile type, relationship to occluding teeth, and relationship to approximating teeth. An ability should be developed to classify a set-up according to arch form. For example there is the typical tapering set-up with its lapping and crowding of the teeth; and there is the square set-up which is frequently even and bold, having generally a spacing of the teeth. The inclination of the anterior teeth is governed by the profile type as is the position of anterior teeth. The prominence of position and incisal edges of the anterior teeth have definite control over lip contour and should not be overlooked in studies of arrangement. Overbite and overjet are controlled by ridge relationship. This is important in esthetics, but not a serious problem. The mechanics and esthetics in extreme overjet and overbite cases are so correlated that the esthetics becomes natural in appearance.

Phonetics and arrangement of teeth are so interdependent that if a careful study of the case is not made, faulty speech will occur.

The esthetic arrangement of artificial teeth is obtained by copying Nature and not by the hit and miss method so frequently employed.

(To be concluded in December)

703 Medical Arts Building.

²Owen, E. B.: Color in Dentistry, J. A. D. A. 22:790 (May) 1935; Study of Human Complexion and Means of Determining Hues and Shades in Edentulous Cases; *ibid.* 12:944 (August) 1925. Orton, F. H.: Color of Teeth, DENTAL DIGEST, 25:321 (June) 1919. Clark, E. B.: Tooth Color Selection, J. A. D. A. 20:1065 (June) 1933. Argue, J. E.: Problems of Tooth Color, J. A. D. A. 24:1341 (August) 1937.

Reproduction of Anatomy and Color in Fixed Bridgework

LEROY E. KNOWLES, D.D.S. and RUSSELL W. BASSETT, D.D.S., Los Angeles

IT WOULD BE ALMOST impossible for manufacturers to make all the molds and shades necessary adequately to replace the missing teeth that dentists are required to restore. Heretofore, dentists have made the best selection that was available, but when they had finished, they were often not entirely pleased with the esthetic results (Fig. 1).

What can be done to improve esthetics in fixed bridgework? When all other factors, such as abutments, castings, assembly, have been skillfully accomplished, there are still two other improvements possible: one is anatomy or morphology and the other is color.

It has been said that morphology is primary to color. After having done considerable work on labial and buccal forms of teeth, we are of the opinion that this is true. A good illustration of this is in the continual changing of the colors of a body of water, which depends on the surface contour. When the water is placid, it usually assumes a light green color. This color changes into the blues and even approaches black when the surface contour is altered by ripples and small waves; in rough water the white caps alter the color completely.

The appearance of an anterior facing is often improved by grinding-in the proper anatomy and reglazing or repolishing it. Indeed this is helpful, and even if the color was not all that was desired in the beginning, the development of the proper anatomy greatly improves the appearance of the restoration. This method, although helpful, still offers some difficulties: First of all, only the morphology, and not the color, is improved. Then again, in grinding-in the labial or buccal anatomy, a great deal of the original color may be ground away; or, porous porcelain may be encountered, which, of course, is difficult to polish or to reglaze.

We do not feel that we have the entire answer to the problem, but we suggest the following:

After the bridge is completed to

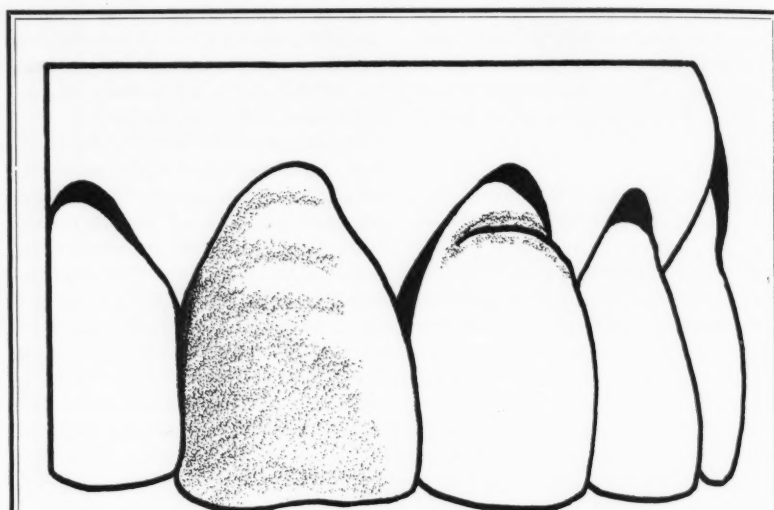


Fig. 1—Unsatisfactory esthetic result.

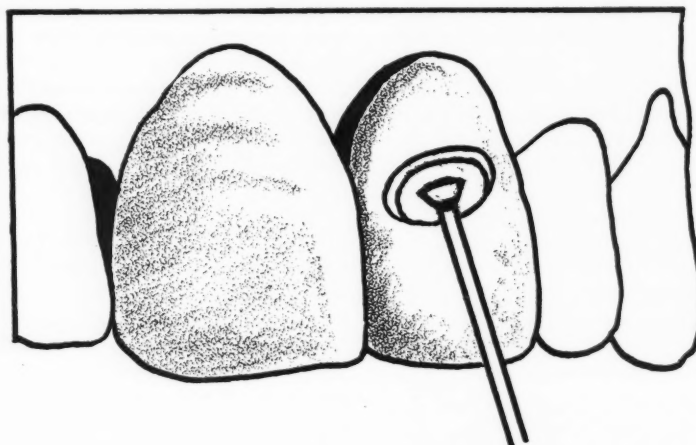


Fig. 2—Stone used to grind away labial surface.

the point of trying in the mouth, the labial or buccal surface is ground away. This cupping out or grinding may extend from the gingival to the very incisal, without destroying the fit of the incisal margin. It may even be ground down to the pins, in the event a long pin facing has been used. Then after selecting the proper colors, the labial or buccal surface is re-

built by the addition of Apco porcelain. This porcelain fuses at approximately 1875° F., and will in no way distort the medium-fusing or high-fusing porcelain that has been added to the tip. Needless to say, it will not distort the original fit of the cast backing in any way.

The first application of the porcelain is run up to a high biscuit bake.

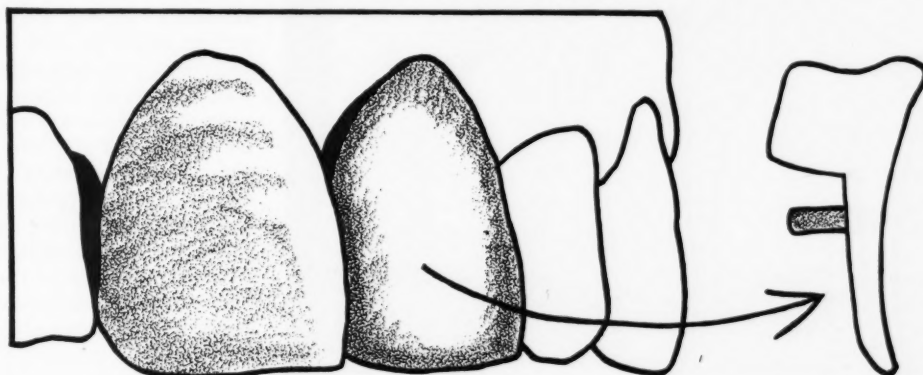


Fig. 3

Fig. 3—Labial surface ground away to a depth of between 2 mm. and 3 mm. The immediate incisal edge is not ground.

Fig. 4—Shades of porcelain are applied to facing, over-building labial form to allow for shrinkage and grinding.

Fig. 5—With small stones, anatomy is ground, in the mouth, to simulate anatomy of corresponding remaining natural tooth.

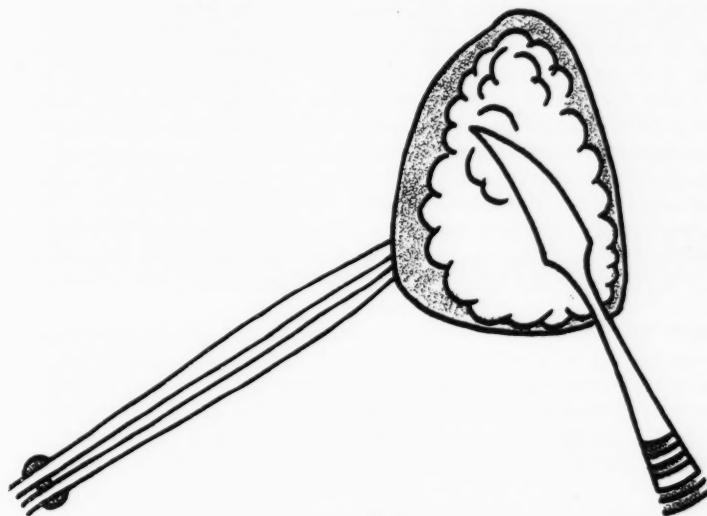


Fig. 4

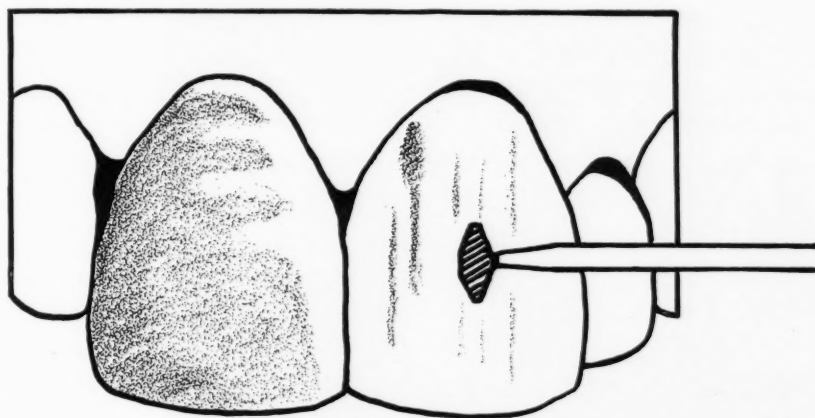


Fig. 5



Fig. 6—Model of case before extraction of upper left central incisor. (Figs. 6 through 12 photographed by Laurence A. Dunn, D.D.S., Santa Barbara, California)

The facing is placed back on the bridge backing in the mouth and the desired anatomy developed into it by grinding. It is then polished and run to the required glaze. The technique, step-by-step, will be described, but it may now be seen that it is possible to improve the anatomy not only of the fixed bridge facing but also of the color.

Technique of Construction

We suggest the use of either long pin facings or the tru-pontic type of facing to be used in fixed bridgework. The description of this technique will include only the long pin type of facing.

1. After the bridge abutments are completed and before the impres-

sion is made a small cone of modeling compound is heated and luted to the abutment castings. Care should be taken that these abutments are thoroughly dry and free from saliva to facilitate the attachment of the compound to the abutment pieces.

2. These cones of compound are attached to the abutments to insure their definite seating into the hydrocolloid impression.

3. With the use of a water cooled tray the hydrocolloid impression is made of the entire dental arch. We suggest making a full mouth impression even though only one tooth is to be replaced, for the following reasons:

(1) It will insure the proper relationship of the opposing model; (2) anatomy, alinement, and angulation of

facings can be better established; and (3) interfering functional occlusion can be better executed when full mouth casts are used.

4. *Constructing the Model*—The abutment castings are coated inside with an anti-flux, such as chloroform and rouge, and definitely seated into the hydrocolloid impression. This is done because we are recommending the pouring of the abutment teeth with a low-fusing alloy, such as Ney's dialoy. This low-fusing alloy is also recommended over the ridge area. By taking advantage of this procedure, we are free to remove the abutments from the model if we so desire. The metal over the ridge area will permit more accurate grinding in the pontic surface of the facing as the metal will act as a marking device to assure more accurate adaptation of porcelain to the ridge area.

5. *Selection of Shade and Mold*—The lighter shades of facings are generally used. For example the shades 5, 7 or 8 on the Twentieth Century shade guide are usually more desirable. This is because these shades are toward the yellow casts and do not contain as much of the grey as does the 6, 10 or 15. We have found that the grey in manufactured teeth is the most difficult color to control, and in our hands it has been more satisfactory to start with those shades that contain a minimum of grey.

A mold is selected which comes closer to conforming to the general mesial and distal contour of the abutment teeth. Little regard is given to the labial contour of the stock facing employed.

6. *Fusing the Porcelain Tip*—For this purpose we recommend S. S. White 2300 porcelain and our colors used here are equal parts of 36 and 37. Shade 36 contains orange and 37 the light grey, which gives a porcelain tip that generally conforms to the root shade of a natural tooth. This color can be varied with the addition of either one of the mentioned shades, increasing the amount of 36 if the requirement of the tip is to be darker or increasing the amount of 37 if it is desirable to produce a lighter shade for this area of the restoration.

7. The facings are arranged on the cast to harmonize in alinement with the remaining teeth, care being taken that they do not interfere with the opposing arch. The facings are held in place with plaster cores, both labially and lingually.



Fig. 7—Stock facing ground in, representing the best possible mold that could be selected. Note difference in morphology; also, add a stock shade which may not harmonize with adjacent abutment teeth.

Fig. 8—Model showing finished case: reproducing a similarity of morphology. Operator has opportunity of making any modification in shading that case may require.

Fig. 9—Model of case before extraction of upper central incisor.

Fig. 10—Stock facing ground in representing best possible mold that could be selected. Note difference in morphology, then add stock shade which may not harmonize with adjacent teeth.

Fig. 11—Model showing facing with its labial surface ground concave, ready to receive application of porcelain.



Fig. 8

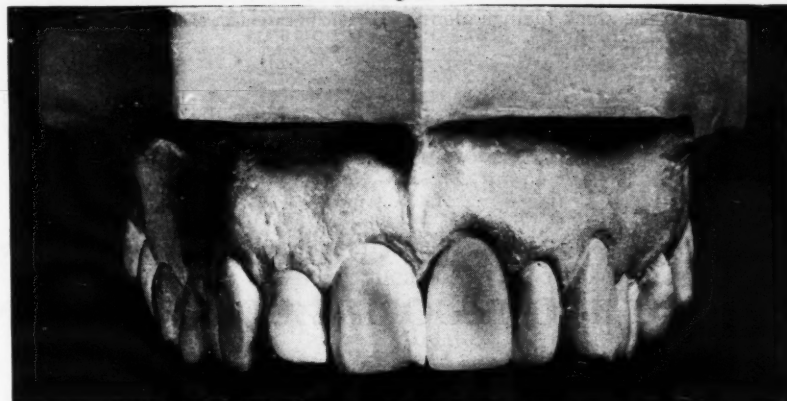


Fig. 9

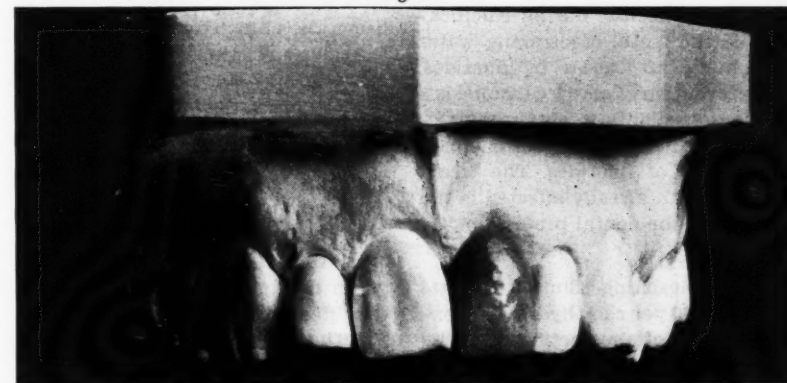


Fig. 10

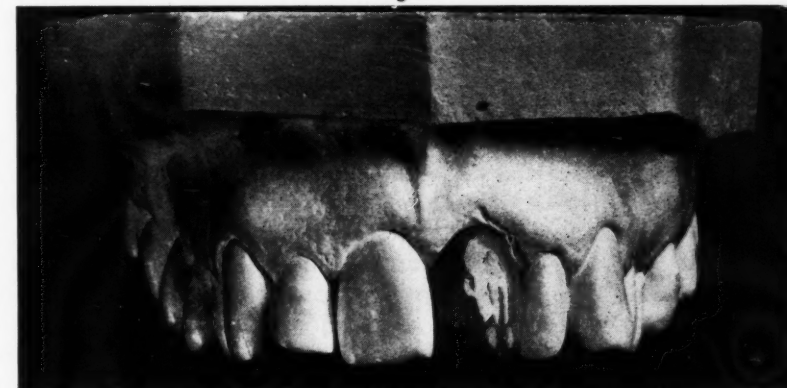


Fig. 11

8. The wax patterns are formed and cast in the usual way, and soldered in the correct position to one of the abutments.

9. The relationship for the soldering of the other abutment is done by use of a plaster core direct in the mouth.

10. After the bridge is completely assembled, it is placed upon the abutment teeth IN THE MOUTH.

11. With a number 11 S. S. White mounted stone the labial or buccal porcelain is ground away to a depth of from 2 mm. to 3 mm., care being taken that the immediate incisal edge is not ground (Figs. 2 and 3).

12. The desired shades of porcelain are now applied to the facing, overbuilding the labial form to allow for shrinkage and grinding (Fig. 4). This application of porcelain is fired at 1750° F. which produces a moderately high biscuit.

13. The facing is taken back to the mouth and with small mounted stones the anatomy is ground to simulate the anatomy of the corresponding remaining natural tooth (Fig. 5).

14. The final grinding should be done with the stone kept wet with Nusol which will aid in keeping the porcelain clean and prevent contamination with small pieces of carborundum.

In grinding-in the anatomy of this facing, it will be found advantageous for the operator to stand in back of the patient and view the labial contour through a mouth mirror placed at the incisal edges of the teeth, and also to observe the facing from a side position.

15. Any natural characteristics can be placed in the porcelain at this time, such as hair-line checks, white decal-

cified areas, and staining that will simulate the natural teeth in that particular case.

16. Before firing the second time which is generally the last bake, any small pits or discrepancies are filled or corrected with porcelain and fused at 1875° F.

We do not feel that the technique offered here is in any sense a cure-all for problems in esthetics in fixed bridgework, but in our hands it has had certain advantages. Without the expenditure of a great deal of time, it is possible to improve both the morphology and color of many fixed bridges in which heretofore it was necessary to use stock facings alone.

306 North Vermont Avenue.



Fig 12—Finished case showing reproduction of morphology on model. Operator can make any modification in shading required.

Clinical Digests

BLEACHING FLUORINE STAIN FROM MOTTLED ENAMEL

[Harold B. Younger, D.D.S.: The Texas Dental Journal, 57:380 (November) 1939.] It is accepted that mottled enamel is caused by the use, during calcification of the teeth, of drinking water containing an excess of fluorides. The prevention of mottled enamel is a civic responsibility to obtain a water supply containing less than one part per million of fluorides. The treatment of teeth already affected is the concern of the dental profession.

Treatment¹

1. The bleaching solution consists of 5 cc. of 30 per cent hydrogen dioxide and 1 cc. of anesthetic ether. The solution is made up fresh at each treatment.

2. The teeth to be bleached are isolated with a rubber dam, cut long enough to extend above the eyes and below the chin. This is done because the solution is somewhat caustic. The operator may therefore wish to wear rubber gloves. Doubled towels should be placed under the dam over the chin and over the upper part of the patient's body to catch any excess liquid. A gauze or cotton roll is ligated over the teeth to be treated and another roll placed under the dam between the lip and these teeth to prevent steam from burning the lip.

3. The bleaching solution should be agitated with a medicine dropper before each application, and the gauze roll ligated over the teeth saturated with the solution. Heat is applied to the saturated roll with a metal in-

strument heated in the Bunsen flame. Overheating will cause pain and possible devitalization of the teeth. The teeth to be treated are not anesthetized, however, and the patient's reaction will help to prevent overheating.

The metal instrument must be made. It should have a metal ball on the heating end to retain heat, and a composition or vulcanite handle to protect the operator's fingers.

4. As the roll dries, more solution is added with the medicine dropper. This is in turn vaporized with the heated instrument. The process is repeated until the entire solution of 6 cc. is used, which usually requires about thirty minutes. The average case requires from five to fifteen treatments at weekly intervals.

¹Ames, J. W.: Removing Stains from Mottled Enamel. J. A. D. A. 24:1674 (October) 1937.

The Editor's Page

AN ACUTE SYNDROME that has not generally been taken seriously by dentists is one involving the mandibular third molar. In young adults pericoronal infections are frequently exquisitely painful and the systemic reactions are often severe. These infections are usually found in cases of partly impacted third molars in which a flap or hood of soft tissue covers part of the tooth. This flap or hood may be traumatized from above by occlusion with the upper teeth or by foreign bodies, such as toothbrush bristles, seeds or mouth débris, which may become entrapped under this flap where the conditions for bacterial growth are ideal.

Many young people have experienced episodes of these acute infections but in later life even when the tooth has not been removed a kind of immunity seems to develop. Even in the case of partly impacted teeth with mucous membrane flaps in the mouths of middle aged and older people, one seldom encounters these acute infections. What kind of local immunity is developed is unknown.

The clinical picture of these infections usually appears as follows: A young adult in the late teens or early twenty's presents with the history of acute soreness involving the mandibular third molar area. There is often swelling at the site and frequently an adenitis of the lymph glands in the area. Unilateral sore throat is not uncommon; complaints of vague face pains are not unusual, and nearly every case is accompanied by varying degrees of trismus. The difficulty in opening the mouth is explained on the basis of the involvement of the fibers of the buccinator muscle by the infection and the difficulty in swallowing is explainable on the basis of involvement of the superior constrictor muscle of the pharynx.¹ At no other period in life are these muscular attachments so likely to be invaded by an acute infection.

Frequently these patients present with the clinical picture of an acute infection, rapid pulse, and slightly elevated temperature. They are likely to be listless and obviously toxic.

It appears that there is something peculiar

about the mandibular third molar area which produces more profound systemic reactions from this type of infection than from other acute infections in the mouth.

The treatment of this condition follows a simple surgical principle of establishing free drainage. Usually it is unnecessary to traumatize the part and inadvisable to use forceful treatments. Incisions to drain the localized infection or trauma produced by extraction instruments, forceps or elevators, are generally contra-indicated. Irrigation with hot irrigants, with the fluid introduced gently under the flap of tissue by a small syringe, seems to be the most successful treatment. Drainage can usually be established by copious irrigation followed by the application of an antiseptic at the site of infection. The application of heat after drainage has been established by irrigation seems to be an accepted method of treatment. Applications of heat externally are advised; application of heat in the form of dental poultices is usually indicated; and the application of heat by frequent mouth lavage is recommended. After the establishment of free drainage the improvement in systemic symptoms is often spectacular. Within a few hours following treatment the patient may appear and react quite normally.

Although pericoronitis may occur during the eruption of any tooth, it appears reserved for the mandibular third molar to exhibit the most pronounced form of the infection. It seems almost unbelievable that many patients with pericoronitis, because of the severity of the symptoms, do not associate the disturbance with dental tissues and are likely to consult physicians. Because of the sore throat, they think that there must be some disturbance in that area and are fearful because of the trismus. A great many cases, seen by physicians, are not treated promptly enough by local methods. It would be well if oral surgeons who are qualified would contribute material on this subject to the general medical literature so that patients suffering from pericoronal infections who first seek the services of physicians may promptly be referred for the services of a dentist.

¹Winter, Leo: A Textbook of Exodontia, Third Revised Edition, St. Louis, The C. V. Mosby Company, 1937, page 379.

The Transformation of the Human Dentition by Immediate Dental Replacements

JAMES HALL SMITH, D.D.S., Philadelphia

WHEN PATIENTS ARE confronted with the loss of their natural teeth, the logical question asked is, "How long will I have to be without teeth?" The question is a natural one, because for many years it was customary and a routine practice for the patient to wait varying periods of time until the mouth had sufficiently healed before dentures were constructed. Today, the problem is approached in an entirely different manner, and in the transformation of the human dentition the dental profession in recent years has accepted and employed the immediate replacement of the natural teeth as a practical procedure and a valuable service to patients. When patients present today, requiring the extraction of teeth and facing this need of the restoration of their natural teeth, they have usually become aware of this service, and know the value of availing themselves of the immediate replacement. Patients are aware that there is no waiting period during which they are required to go without teeth; embarrassment is thereby eliminated and one obstacle is overcome.

Advantages to the Patient and Dentist

1. In immediate replacement of teeth, there is no waiting period; the patient is never without teeth.

2. Healing of tissues progresses with greater rapidity. The immediate denture provides a protection to the sockets, serving as a bandage or splint in the protection of the tissues following extractions. The denture controls slow or persistent postoperative hemorrhage by assisting in the organization of the blood clot, which is Nature's protection for the socket. There is more persistent bleeding in cases in which the immediate replacement has not been used. A few of the reasons for this are herewith enumerated: (a) Interference in the formation of a normal blood clot by injury or retention of food particles and hard substances that gain entrance into the oral cavity; (b) dissolution of the elements in the formation of the clot by liquids; (c) forceful rins-

ing by the patient in an unprotected area following extractions; (d) exposing of the sockets and failure to provide a protection.

3. Conservation of hard and soft tissues has been proved in immediate replacement. There is a stimulating action against the ridges. The bone is conserved by intermittent pressure of the dentures.

4. Protection is given to the alveolar process and ridges against traumatic injury and infection or undue pressure. There is less resorption of ridges under immediate dentures. The alveolar process becomes denser and the ridges round out more uniformly, providing a more stable and harder foundation.

5. Corrections in facial contour and profile are accomplished. The average case requires a bite correction procedure. In virtually all instances corrective procedures should be incorporated into the construction of immediate dentures, increasing the vertical dimension in some degree. Facial changes and closure of the bite relation have been found to occur. This loss of vertical dimension is a progressive shortening of the natural denture space.

6. Loss of vertical dimension brings about progressive changes in the physical and functional action of the musculature. The muscles of mastication and of facial expression are all affected in their functional range under bite closure. Again the reestablishment of lost vertical distance at the time of the immediate replacement makes it possible to improve the esthetics in the individual case. Marked or apparent alteration of the musculature follows progressive closure of the vertical distance. Proper reestablishment of the vertical relation is of particular advantage to both the patient and dentist, and is accomplished by supporting the bite in increasing the distance between the jaws. Correction is made both in placement and arrangement of teeth.

7. Muscle fatigue is prevented in proper establishment of the vertical opening in immediate replacements. Muscle fibers then function so that

the resultant force is in the direction of the long axis of the teeth when they are correctly positioned, and this brings about the highest degree of efficiency in their functional range of movement.

8. The improvement in appearance, comfort, and efficiency is again unquestionably of advantage. The patient becomes readily accustomed to wearing the dentures, handling them with ease.

9. Speech is not affected after this procedure. Strangeness in speech and enunciation is more often encountered when patients have been without teeth for some time and in those cases of patients requiring correction who do not receive this type of service. In cases of immediate replacement of the teeth the speech is definitely improved, because of the fact that the soft tissues of the mouth, and musculature of the parts are more properly positioned to produce articulate speech through the increase of space in the oral cavity. Resonance is improved by the correct relation of the anatomic parts involved in speech. The human voice can have a decided improvement in tonal quality when the correct denture space exists, but it can likewise sound inarticulate and choked in a crowded and closed condition of the oral cavity.

10. Masticating efficiency is decidedly improved, thus aiding digestion. The oral cavity is the gateway or entrance for the first step in the preparation of food for digestion and assimilation in supplying nourishment and building up the body tissues.

The usual case requiring immediate dentures consists of a dental mechanism operating under reduced efficiency. When the loss of teeth is inevitable, the improvement in masticating efficiency, increased by changing a crippled and handicapped dental apparatus, certainly has a direct bearing on the ability of the patient properly to prepare food for digestion; consequently an efficient chewing mechanism has a direct effect on the general health and well-being of the

(Text continued on page 423)



Color Plate No. 1

Upper and lower partial dentures at time patient presented for treatment. Note closed bite relation; traumatic occlusion with extreme recession of gums.



Color Plate No. 2

Partials removed showing remaining natural teeth. Inclinations established by attrition of anterior teeth.



Color Plate No. 3

Immediate replacement of full upper and lower dentures. Anterior opening is shown. See also Fig. 10.

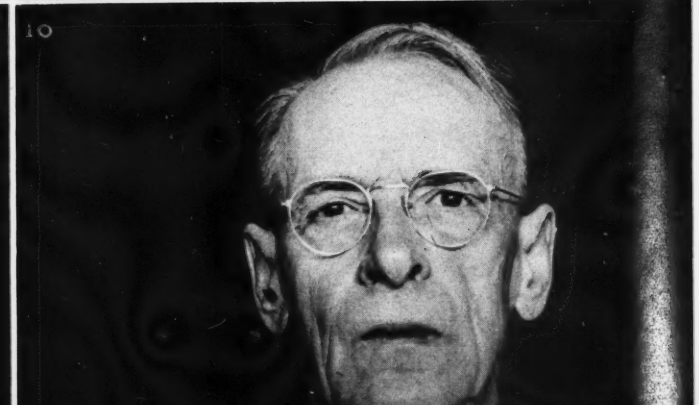
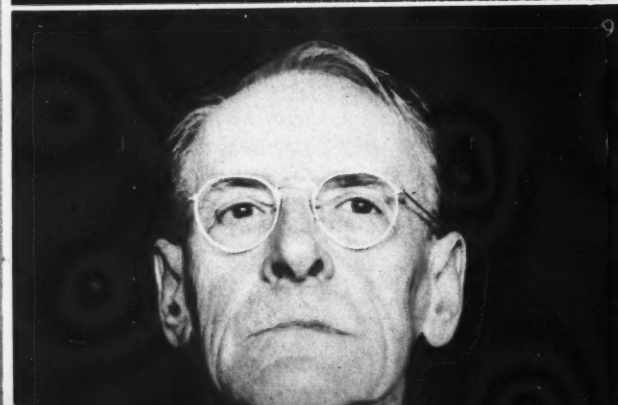
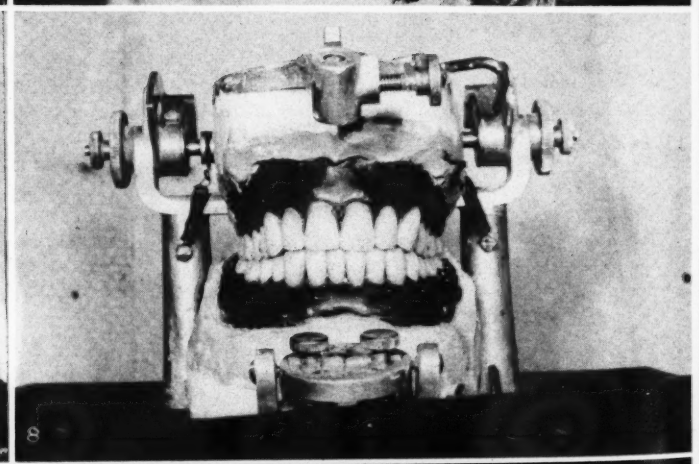
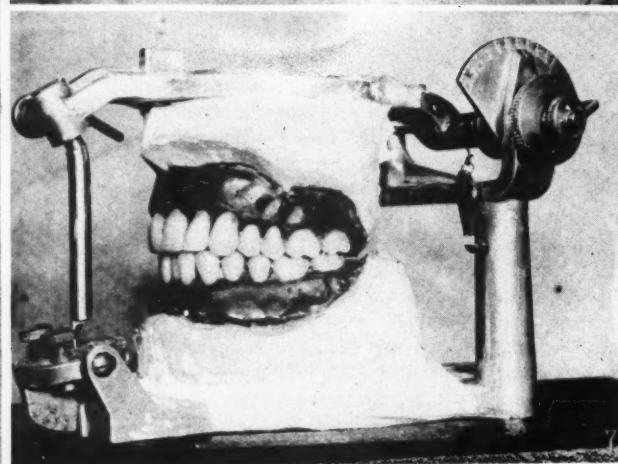
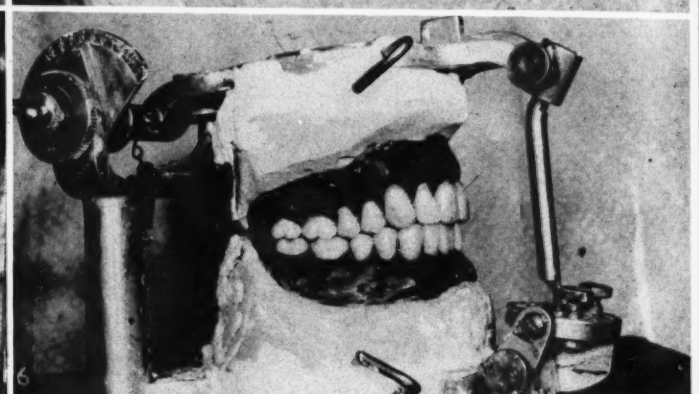
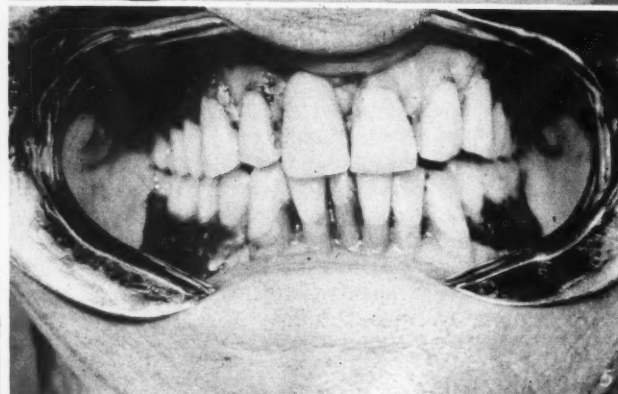
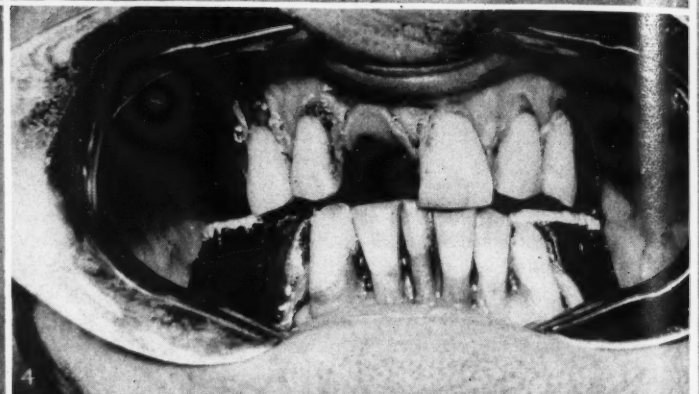
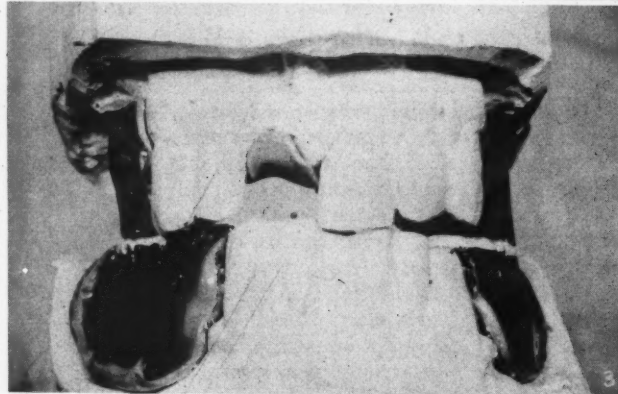
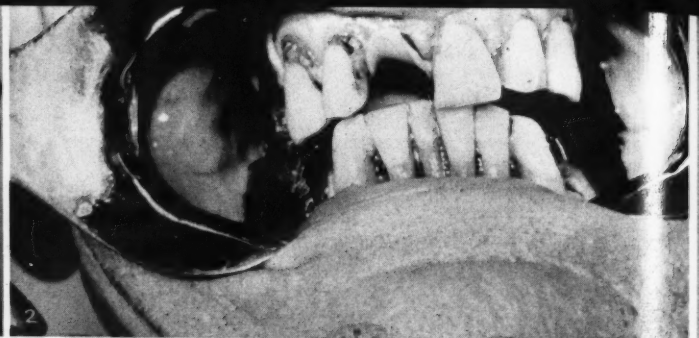
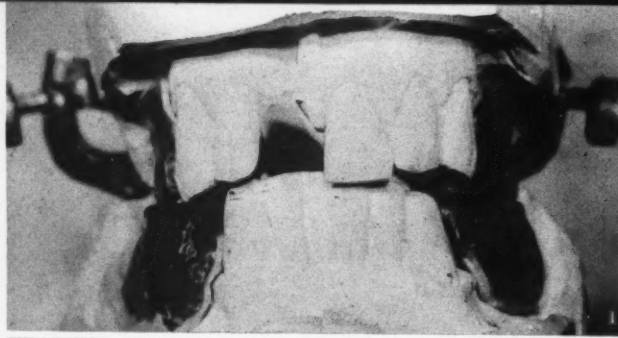


Fig. 1—Compound bite blocks prepared on articulator at approximate increase in vertical opening.

Fig. 2—Compound bite blocks shown in the mouth.

Fig. 3—Bite blocks, on articulator, showing white compound placed in between red compound, preparatory to registering the bite.

Fig. 4—Registration of the bite. To register the bite, material is placed posterior to the cuspids, in order to prevent an incorrect anterior bite. Placing the material in this region prevents the patient from thrusting the lower jaw forward. The important consideration is that the functional pull of the muscles is being brought into play in registering this bite, under stress. This position is accepted as the opening to construct the dentures.

Fig. 5—Try-in of teeth, at established vertical opening.

Fig. 6—Right lateral view of set-up.

Fig. 7—Left lateral view of set-up.

Fig. 8—Anterior view of set-up. Following the complete articulation, anterior clearance is secured by lengthening the posteriors to reestablish anterior contact in protrusive excursions. This occurs when the balancing of the mandible follows, in the seating of the dentures (Color Plate 3).

Fig. 9—Facial view prior to removal of teeth.

Fig. 10—Following insertion of dentures. Note increase in vertical dimension.

individual. Dentures that function properly can therefore materially contribute to keeping the body in a state of health.

It is the general belief and practice that the posterior teeth should be extracted first and the ridges allowed to resorb in order to provide a firmer foundation for the denture. The anterior teeth are allowed to remain for an intervening period of several weeks. The denture constructed immediately replaces only the anterior teeth.

Indications

Partial or full dentures (upper and lower or both), by this immediate replacement method, may be constructed with or without the labial rim, depending on the prominence of the labial alveolus. In some instances where undercuts in the alveolar bone occur, with accompanying prominence of the labial crest, alveolectomy of a conservative nature is indicated.

The important factor to consider in any denture program is preservation of the bony framework in so far as it is possible to do so.

When constructed without a rim, the teeth are selected longer than when a rim is to be employed. The teeth are ground to fit the sockets by shaping pontics, guarding against any impingement on the labial alveolus or the interdental septum.

Impressions

A combination compound and colloidal impression material in water-cooled trays secures the most accurate impression in this service of immediate replacements.

Selection of Teeth

Too much importance cannot be placed on the selection of teeth in attempting to reproduce the natural tooth in form and size. Custom selection of teeth can bring about the desired esthetic result by providing a wide selection of molds. The shades of teeth may be staggered in order to bring about harmony in color.

When the teeth selected are over-size, especially as to length, the necks should be prepared by grinding to afford additional means of retention in the plastic material and also to accentuate the line of demarcation between the collar and the labial or buccal surface.

Arrangement of Anterior Teeth

When artificial teeth are to duplicate the natural, one tooth is removed with a mechanical saw or cut away with a steel pen point and broken off. Care must be taken not to mar the area occupied by the root. The labial edges of the cast can be scraped slightly, as this area collapses, in the region of the labial gum tissue. Individual characteristics of tooth arrangement can be followed, when it is indicated, or varied, to create the desired esthetic effect. Overlapping of teeth and variations in the position are left to the discretion of the operator in the arrangement he desires to create. It is helpful to replace each

tooth by its denture duplicate before all teeth are removed from the cast.

A duplicate cast is a check against error and a guide to tooth arrangement.

Grinding and Staining Anterior Teeth

Before the anterior denture teeth are arranged on the cast, they should be carefully ground and shaped to imitate the natural teeth they are to replace. The incisal edges should be inclined at the long axes of the teeth and in the direction that normal wear has occurred through the attrition of the natural teeth, duplicating the inclinations. Irregularities of the natural teeth should be duplicated or varied according to any changes indicated.

Stained areas or check lines may be reproduced with porcelain stains and a high-fusing glaze applied following the stain. A knife-edge stone may be used instead of staining, roughening the porcelain; these surfaces acquire a stain after wearing, especially when the patient uses tobacco.

Servicing Dentures

All immediate dentures must be considered transitional. It is to be expected that tissue changes will occur in the foundation of dentures immediately inserted. Patients should be informed about these expected changes in the tissues. An explanation to the patient, of the necessity to adjust the dentures by rebasing them is imperative. By so doing patients will realize what to expect in the servicing of the dentures. Adjustments in the occlusion from time to time will be required as a part of the service in assuring the patient of continued comfort and efficiency.

In rebasing dentures, material should be ground away and a tracing stick of green compound applied around the periphery. Any corrective material, such as a plaster or any of the corrective pastes, can be used to secure the impression in a rebasing technique.

Central Medical Building.

Compound Composite Odontoma

RALPH W. EDWARDS, B.S., D.D.S., Kansas City, Missouri

THE ODONTOMAS comprise a group of tumors arising from deviations in normal tooth development. They may be cystic or solid in form. The cystic type may or may not contain partly or well-formed teeth. The solid type is composed of tooth tissues either in normal or atypical tooth form, or in conglomerate mass without tooth identity.

The compound composite odontoma consists of normal or supernumerary teeth associated with numerous denticles and irregular portions of enamel, dentine, and cementum. All these structures may be loose or fused.

Report of Cases

CASE 1: History—A colored man, aged 35, died from an unknown cause,

and the cadaver specimen from the anatomic laboratory of the Kansas City-Western Dental College was studied.

Examination—Well developed jaws and teeth in normal occlusion were present in the dry specimen. The upper right cuspid and lateral were missing from the arch. The lower third molars and upper left third molar were impacted. A protuberance existed on the anterior surface of the right maxilla, extending from the medium sagittal plane to the zygomatic process and from the alveolar border to the nasal opening. A smaller protuberance existed on the right palate from the first molar region anteriorly to the alveolar border.

Description of Odontoma—The

bone in the area of each protuberance was removed, revealing a tumor mass and the missing teeth (Figs. 1, 2, and 3). The odontoma was composed of an indeterminable number of irregular teeth and denticles, fused into one mass. In dimensions, the greatest labio-lingual axis measured 25.5 mm.; the supero-inferior axis, 22.0 mm., and the mesio-distal axis, 20.5 mm. The right cuspid was in an oblique position posteriorly to the tumor, with the apex of the root near the nasal opening and the tip of the cusp over the mesio-buccal root of the first molar (Fig. 1). The right lateral incisor was lying in a horizontal position in the palate, the root apex at the midline, and the incisal edge toward the second bicuspid (Fig. 3).

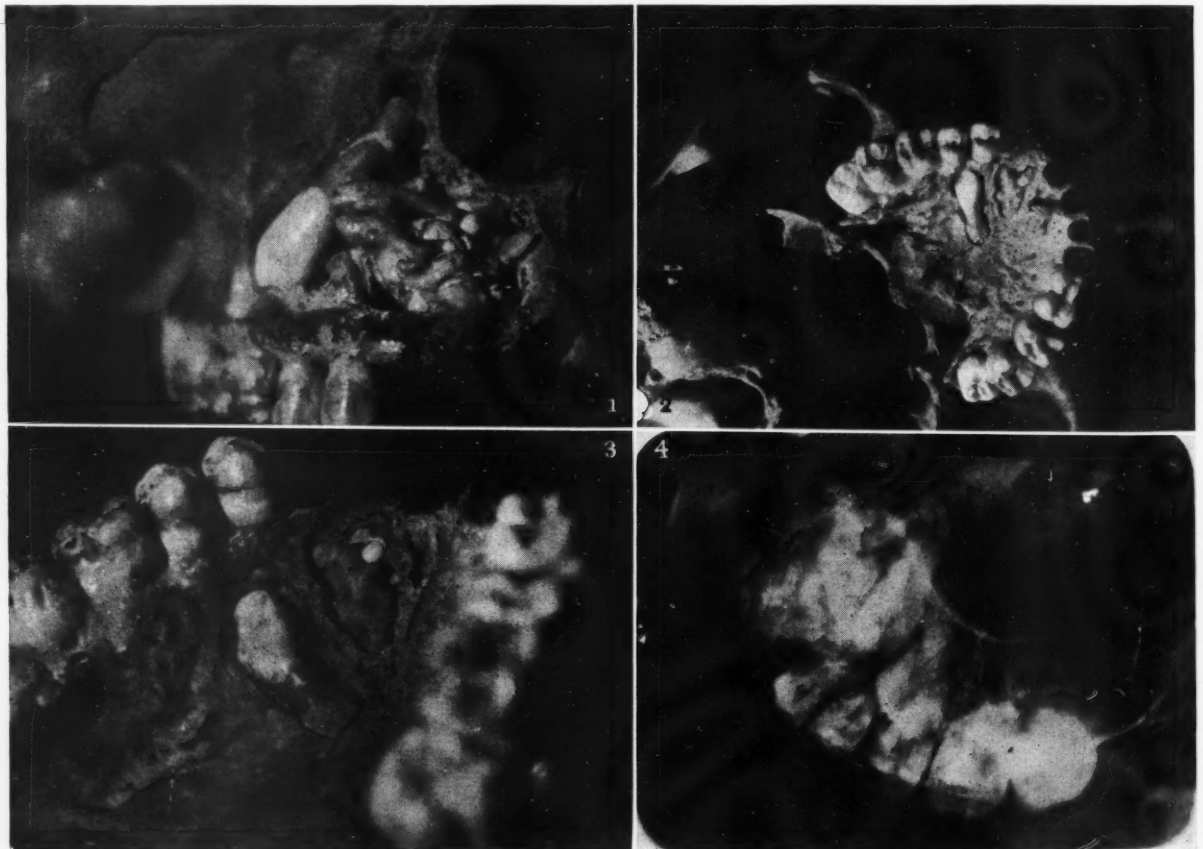


Fig. 1 (Case 1)—Anterior view of odontoma and cuspid.
Fig. 2 (Case 1)—Relation of odontoma to palatal structures.

Fig. 3 (Case 1)—Palatal view of odontoma and lateral incisor.
Fig. 4 (Case 1)—Roentgenogram of odontoma and impacted teeth.



Fig. 5 (Case 2)—Roentgenogram of odontoma in mandibular incisor area.

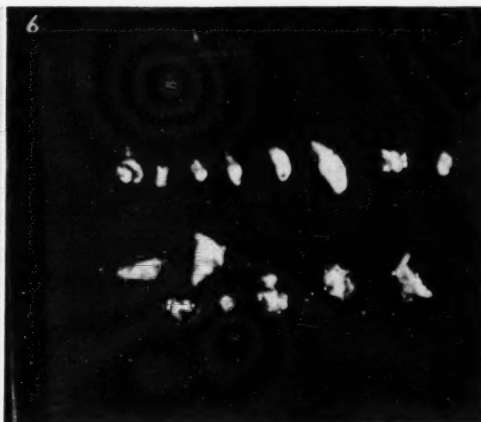


Fig. 6 (Case 2)—Denticles and irregular-shaped particles of tooth tissues removed from jaw.

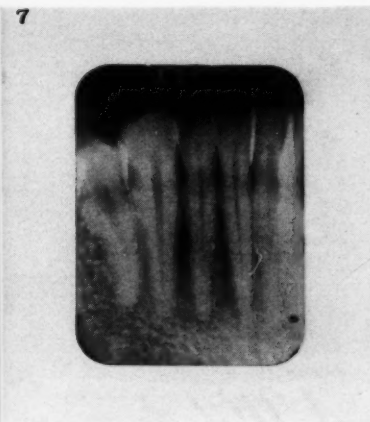


Fig. 7 (Case 2)—Roentgenogram of area shown in Fig. 5, eleven years after the operation.

Neither the cuspid nor the lateral incisor was fused to the tumor. Fig. 4 is a roentgenogram of the area.

CASE 2: History—In a routine roentgenographic examination of the teeth of a man, aged 19, a tumor mass was observed in the mandibular incisor region (Fig. 5).

Examination—Clinical examination revealed a slight protuberance on the lingual surface of the mandible in the

region of the lower left central and lateral. The labial contours were normal. The dentition was otherwise without abnormalities.

Operation—Under local anesthesia the lingual tissues were retracted, exposing the bone covering the tumor. The thin bony covering was removed with a chisel, and from the crypt containing the odontoma, fifteen separate denticles and irregular-shaped

masses of tooth substance were removed (Fig. 6). The cavity in which the denticles were found extended anteriorly between the left central and lateral incisors and over the apical third of each of these teeth. The vitality of these teeth was preserved. Recovery was uneventful.

Fig. 7 is a roentgenogram of the area eleven years after operation.

1108 East Tenth Street.

Clinical Digests

THE SILICOSIS HAZARD IN MECHANICAL DENTISTRY

[Louis E. Siltzbach, M.D.: J. A. M. A. 113:1116 (September 16) 1939.]

MECHANICAL DENTISTRY has heretofore not been listed among the many industries known to be associated with the silicosis hazard. A survey of the mechanical dentistry industry is being planned by the Division of Industrial Hygiene of the New York State Department of Labor.

1. Silicotuberculosis was confirmed at autopsy in the case of a dental mechanic, aged 35, whose only occupation during a nineteen year span consisted of polishing dentures, presumably with pumice.

2. A sample of the "pumice" used by the patient was obtained from his dental laboratory for chemical an-

alysis and was found to be a substitute abrasive powder which contained 48 per cent free silica. Knowledge of the free silica content of a dust is crucial toward an evaluation of the silicosis producing possibilities of the dust.

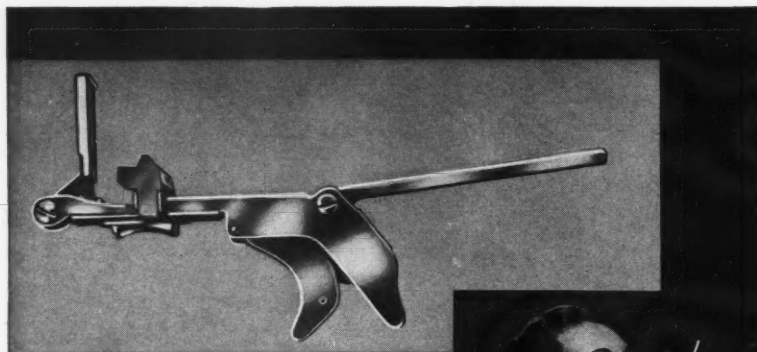
3. The unventilated workroom environment made possible a concentration of the dust known to produce silicosis in other trades when similar concentrations are present.

4. Pumice, according to analyses made by the U. S. Bureau of Mines, is a mixture of complex silicates of aluminum, sodium, potassium, calcium, magnesium, and iron. Investigation revealed that many dental laboratories were purchasing a sub-

stitute abrasive powder called "pummy" which came into use during the World War when Italian pumice was difficult to obtain. The purchasing agents were not aware that their shops were using a substitute for pumice.

Precautionary Steps to Eliminate Silicosis Hazard in Mechanical Dentistry

1. The pumice substitute "pummy" should be discarded.
2. The disease-producing potentialities of pumice itself should receive further study.
3. Dental laboratories should be required to equip their polishing apparatus with exhaust hoods.



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*J. A. D. A., pp. 390-398, March, 1939

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NOTES ON THE

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Dentistry Is Not All . . .

HIS WIFE COULDN'T drag him to the movies because he said the movies competed with dental practice. Instead of straining their eyes and flattening their seats, people should be spending their money for positive health benefits—having their teeth cleaned, for example. He chased automobile salesmen from his door because the automobile was an instrument of vice and destruction and people spent money for gasoline that should go for inlays. Every time he saw women's dainty things in the store windows, he cursed and fumed; women should wear cotton stockings and muslin-to-the-skin, so they would have enough money to buy pretty partial dentures. He wouldn't play golf or aid and abet its playing by others because he said that the time men spent on the golf course would be better spent in the dental chair having some pleasant porcelain jacket crowns constructed.

All about him this dentist saw people having fun and he resented it; they should be under dental treatment instead, he insisted. But this man missed the boat completely. He forgot that everyone, even dentists, want fun and release first and other things later. The automobile comes

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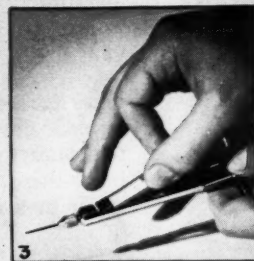
Cleansing, stimulating mouthwash and gargle

Movie of a SAFE, SIMPLE and EFFECTIVE INJECTION



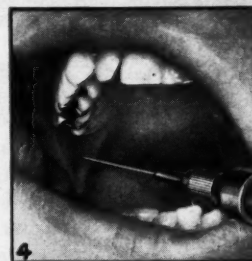
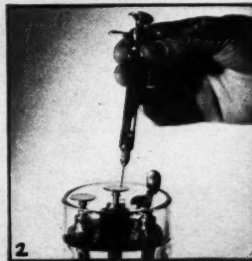
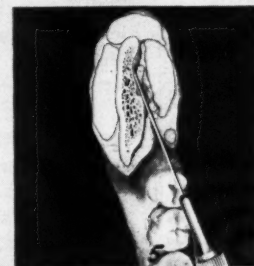
ONE: Apply thin film of Waite's Pontocaine Paste to previously dried site of injection with plastic or other instrument. Do not massage. Pontocaine Paste exerts a speedy, penetrating anesthetic action, without sloughing, and is antiseptic, obviating necessity of sterilizing tissue.

TWO: Remove completely assembled, rustless, chrome plated "Carpule" cartridge syringe with No. 4-23 gauge Cook Rustless Steel Needle and long hub from Waite Syringe Jar containing Waite's Syringe Jar Solution.

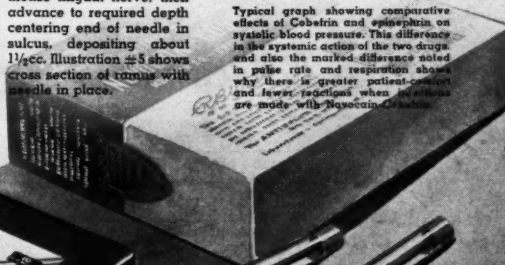


THREE: Insert Cook or R. B. Waite cartridge of accurately compounded, sterile, stable and isotonic Novocain-Cobefrin into syringe. Cartridge diaphragm can be sterilized by usual methods.

FOUR: Palpate post-molar triangle with index finger with nail over internal oblique line. With barrel of syringe lying between opposite bicuspid teeth, direct needle parallel to occlusal plane of lower teeth toward ramus and palpating finger. Make puncture at apex of pterygo mandibular triangle, deposit two or three drops of solution, advance about $1\frac{1}{4}$ ", deposit four or five drops to anesthetize lingual nerve, then advance to required depth centering end of needle in sulcus, depositing about $1\frac{1}{2}$ cc. Illustration #5 shows cross section of ramus with needle in place.



Typical graph showing comparative effects of Cobefrin and epinephrin on systolic blood pressure. This difference in the systemic action of the two drugs, and also the marked difference noted in pulse rate and respiration shown why there is greater patient comfort and fewer reactions when injections are made with Novocain-Cobefrin.



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before the removable bridge in the scale of consumption because it gives swift flight and power to the one who owns it. Silk and satin next the woman's skin give her a moment of elegant superiority that no gold inlay ever gave. Marching, swinging, and clubbing over the terrain of the golf course is to modern man an escape from the dreary drudgery of a job and an adventure that is part military and part primitive. Striking and pursuing, driving a white ball into its hole on the green is, I am sure, vicarious hunting. And isn't the quiver of shining metal clubs, the sheath for the arrows of the hunt? Of course, men prefer this adventure to sitting confined in the dental chair. Who wouldn't?

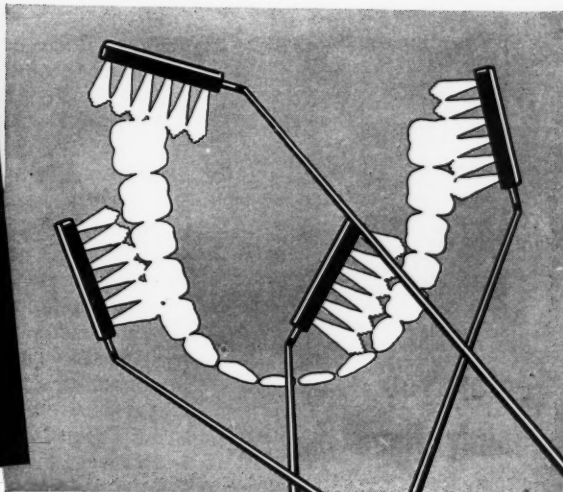
Let people have their fun—and us too. No one ever put aside the buying of an automobile because they needed new dentures. No amount of scolding and carping will make them change and want dental service instead. If we can show patients that early care and correction of the simple dental disorders costs less, gives less pain, and takes less time, we can catch their attention; but let them have their automobiles, their golf, their silk stockings—these, too, have health values of another kind.

Outline for Retirement . . .

It is the first day of the dental college year—bright, early October. The campus of Ohio State University swarms with youth: some carrying dental instrument cases; anatomy students with boxes of bones; hard-heeled boys and sloppy-sweatered girls. It is a day that turns a mind back to one's own youth and ahead to one's old age. It is the perfect time, in the midst of youthful swarming, to talk of a philosophy for retirement. At the Faculty Club of Ohio State University, we middle-aged and oldsters gather around the table; outside are the raucous shouts and the shrill voices. At the head of the table sits a dean emeritus of the dental college, H. M. Semans. Members of his faculty and his successor are around the board: Earl Jones, Paul Kitchin, H. S. Shumway, and Wendell Postle.

This retired dean has made the mental adjustment that many retired people fail to make. He plays his golf every agreeable morning, but not too strenuously or seriously. He reads his newspapers diligently, but without rising wrath or indignation. He tends

GOES PLACES
and
DOES THINGS



The "mouth-mirror" angle places the back molars within reach and facilitates brushing the difficult lingual surfaces of incisors.



The thin metal shank permits seating of the brush head in a horizontal position. Bristles can be worked in between the teeth as readily on the tongue side as on the cheek side of the teeth. Three rows of high quality, natural-tufted bristles—spaced to penetrate between the teeth.

SQUIBB *ANGLE* TOOTHBRUSH

... is specially designed to afford maximal accessibility in cleansing teeth.

... examine its design and you'll see why it's so effective.

... a brush you will like to use yourself—a toothbrush you will be pleased to recommend to your patients.



SQUIBB DENTAL CREAM • SQUIBB TOOTH POWDER

JUST as there are certain things you expect of a toothbrush, so there are factors that influence the choice of a dentifrice for use by your patients.

You expect a dentifrice to clean and polish teeth safely and effectively. You expect it to be free from harmful abrasives and astringents.

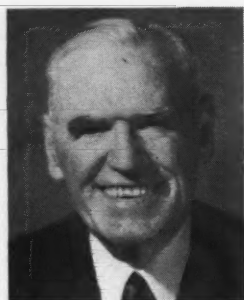
Squibb Dental Cream meets these requirements,

for this smooth, creamy, pleasant-tasting dentifrice contains nothing which might injure the teeth or the delicate mucous membranes of the mouth—yet it cleans safely and effectively.

Patients who prefer powder will enjoy Squibb Tooth Powder. It provides the same scientific advantages as Squibb Dental Cream.

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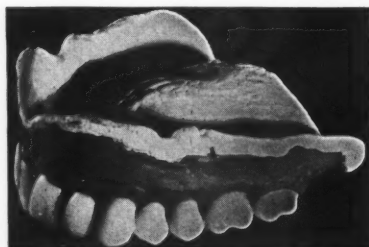
"Doctor, you certainly fixed me up!"

"You had me worried for awhile, but THESE plates fit like a glove and work fine!"

Sometimes it takes more than one attempt to make a set of dentures that fit and function really well . . . and there's no greater help to superior adaptation than "Kelly's Paste," used to CORRECT and REFINE every impression.

You Can Practically Avoid Misfit the Cause of Most Denture Grief

Dr. Kelly's Impression Paste is applied, to a thickness of 1 to 3 mm., to the surface of a snap impression, base plate or denture to be adapted. It registers every detail with amazing accuracy, hardens quickly, and lasts without distortion through to the final flasking.



"Kelly's Paste" has brought immeasurable benefit to thousands of dentist users all over the world. Why not give it a thorough trial on your own work? Order from your dealer, package \$2.50. We guarantee your satisfaction—if for any reason you are not pleased, the package is returnable for full credit. Isn't that a fair proposition, too good to pass up another day? Kelly-Burroughs Laboratory, Inc., 143 N. Wabash Ave., Chicago, Ill.

Dr. KELLY'S Impression Paste

[For full information with suggested technics, send coupon, page 438]

his garden for the fun of working under the sun in the black earth, without thought of prizes or blue ribbons. He explores the country for new places to see and new adventures in eating. He sits and smokes his pipe; he smokes his pipe and sits.

Dean Emeritus Semans does not threaten to write the book "that I could never get to while working." Like a sensible person, he is going to enjoy his leisure in mellowness, not in scrivening. He has short patience with the pulse-taking, symptom-enumerating retired people.

If we live long enough, we all face retirement from active duty. We cannot begin too early our preparation for this leisure. If at 35 or 40 we have established interests that we can continue to pursue throughout our lives, we will have started an outline for retirement. We cannot begin too early in our earning career to set aside a little for the unproductive years. The dentist does best to save conservatively and regularly. If dentists begin a saving program at the age of 30 and follow it unswervingly for twenty-five years, they will have built at the age of 55 estates of the following sizes: By a weekly saving of

\$10 an estate of \$19,854; \$15 a week, the sum of \$29,376; \$20 a week, the comfortable wealth of \$39,168.

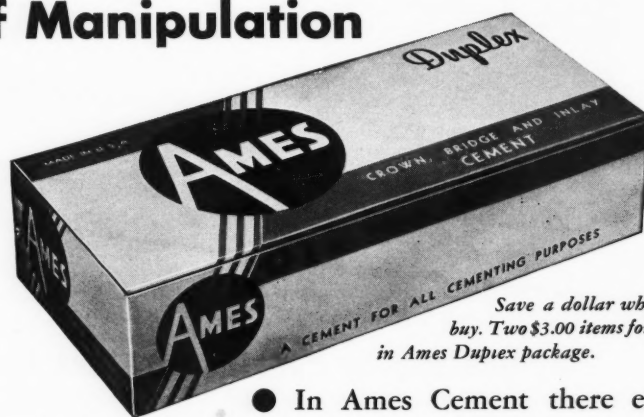
It requires both material substance and mental adaptation to enjoy the fruits of retirement. We cannot begin too early to prepare for both.

The Bartender's Standards . . .

Whenever we slide up the bar for a drink the bartender makes a quick mental note. If he is a smart one at the trade, he has the bellicose and the weeping drinkers charted. He knows pretty well in advance who may get sick in the corner and can tell at a glance the arm-around-the-shoulder, chummy type. He likes people who hold their liquor well—and don't we all?

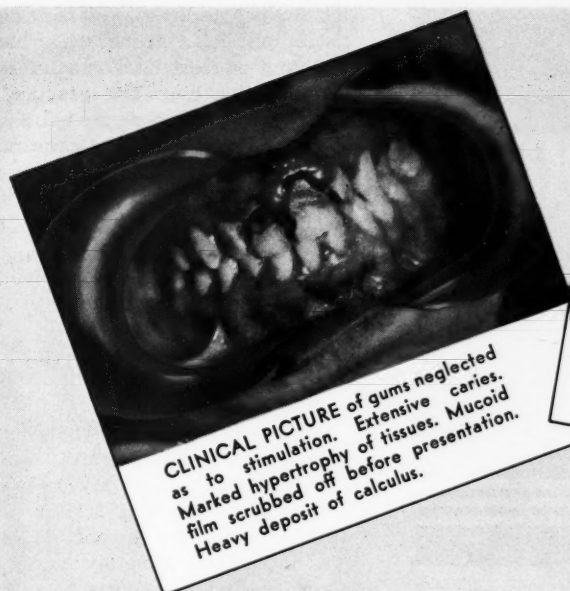
This is no temperance lecture. The world would be a dismal place for most of us without an occasional drink. But dentists should be careful where they drink and with whom. People do not mind very much their grocer drunk, so long as he doesn't tangle up the food order. A hang-over doesn't affect the quality of the shirt the clothing salesman offers. If he can count straight and not be too bleary-eyed, the banker may do his

Smoothness Of Mix And Ease Of Manipulation

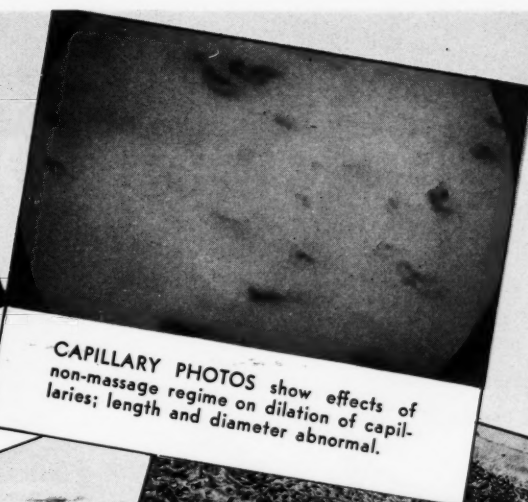


● In Ames Cement there exists an equitable balance of the necessary physical properties. These are so adjusted as to give the best clinical advantages and meet all clinical requirements. Nothing else so completely covers clinical necessities. The W. V-B. Ames Company, Fremont, Ohio.

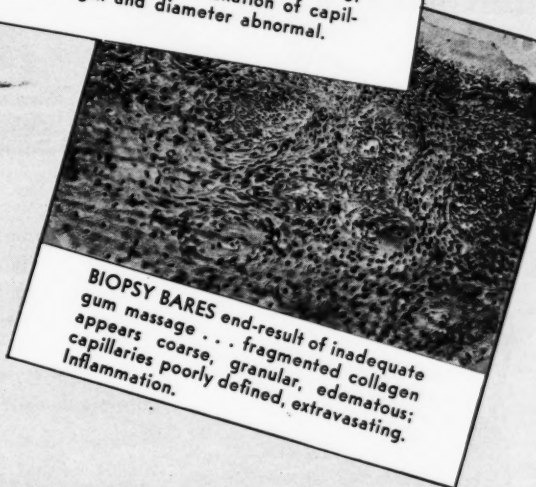
AMES DENTAL CEMENTS



CLINICAL PICTURE of gums neglected as to stimulation. Extensive caries. Marked hypertrophy of tissues. Mucoid film scrubbed off before presentation. Heavy deposit of calculus.



CAPILLARY PHOTOS show effects of non-massage regime on dilation of capillaries; length and diameter abnormal.



BIOPSY BARES end-result of inadequate gum massage . . . fragmented collagen appears coarse, granular, edematous; capillaries poorly defined, extravasating. Inflammation.

CLINICAL FINDINGS
CAPILLARY STUDIES
TISSUE SECTIONS

**ALL SHOW THAT GINGIVAL
MASSAGE IS VITAL**



Stagnant blood in flabby gums usually tends to resume a more normal flow when inadequately stimulated capillaries are aroused by daily use of IPANA plus massage. Teeth and gums may once again receive more adequate nutriment; removal of waste matter may proceed apace. Firmer gums provide a more secure anchorage for the teeth . . . Brushing with IPANA cleans teeth gently and thoroughly . . . Samples on request.

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DENTAL SUPPLIES



job. But people do not want *their* dentist or physician drunk. They have, and for good reason, set up a different standard for him. The practice of dentistry requires a steady hand and a good eye. No one wants the man with the hang-over slopping dangerous drugs about or approaching unsteadily with piercing, cutting instruments.

I was having a drink with a dentist friend at his club when the bartender announced:

"I don't like to see the doctors around here getting tight."

"Why not?" we asked.

"Well, they're different. They should know what they're doing all the time. I'm not going to send my wife and kids to any fella that I know gets drunk. I like to see the doctors have fun, but I don't want my family or myself treated by a dentist or a physician who is jumpy with a hang-over."

We don't establish or maintain a dental practice by being too hail-fellow. People may laugh at our alcoholic antics, but they are likely to take their dental troubles elsewhere.

Selling a Practice . . .

I have been asked about a ticklish subject, "Can a dental practice be sold?" Of course, physical equipment can be sold and I suppose something can be asked and received for good will under the belief that a dentist can transfer some of his patronage to one who succeeds him. This inquiry concerned a dentist who was moving away and agreed to turn over his practice to a buyer who would pay a fixed sum and a percentage on future business from "old" patients. The question is, What right has a man who has retired from practice and performs no services to expect any fee? Isn't this a form of fee-splitting? Why should people pay 20 per cent or 25 per cent additional on a fee for professional service to a person who performs no service whatever?

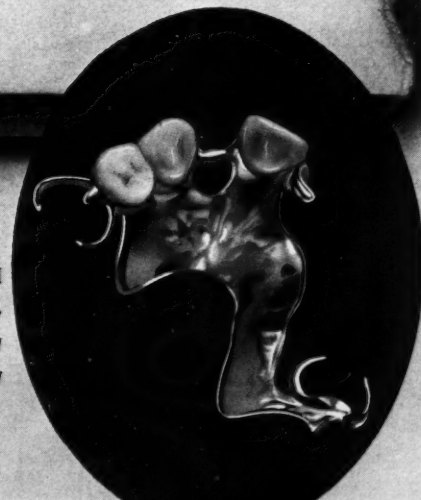
Absentee landlordism has been opposed by European peasants for thousands of years. And in that case the landlord at least owned the productive land. Off hand, I do not know what the ethical code of the dental profession carries on this subject of practice sale, but I feel that taking a percentage from a practice by an absentee dentist is a worse form of fee-splitting than the usual form in which a dentist in practice sees a pa-

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You Should See My Doctor's Office!

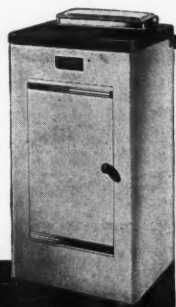
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tient and refers him, presumably, to a specialist with particular talents to treat the specific condition. Fee-splitting in any form is objectionable and fortunately is not widely practiced in dentistry. My answer to the inquiry, then, would be that selling a practice under terms of future percentages is fee-splitting; therefore, professionally degrading and unjust. — E. J. R.

DENTAL MEETING

Dates

District of Columbia Dental Society, second and fourth Tuesdays in each month from October to June, United States Public Health Auditorium.

Ohio State Dental Society, seventy-fourth annual meeting, Neil House, Columbus, Ohio, November 6-8.

Louisiana State Dental Society, sixtieth annual meeting, Monroe, Louisiana, April 18-20, 1940.

Minnesota Dental Association, annual meeting, St. Paul Auditorium, St. Paul, Minnesota, February 27-29, 1940.

Greater Philadelphia Society, annual meeting, Benjamin Franklin Hotel, Philadelphia, January 30-February 2, 1940.

Chicago Dental Society, midwinter meeting, Stevens Hotel, Chicago, February 12-15, 1940.

American Association of Orthodontists, thirty-eighth annual meeting, Edgewater Beach Hotel, Chicago, May 13-16.

Alpha Omega Fraternity, annual convention, Essex House, Newark, New Jersey, December 30-January 1.

Tennessee State Dental Association